

## Purified anti-Cytokeratin 18

**Catalog # / Size:** 628401 / 25 µg  
628402 / 100 µg

**Clone:** DA-7

**Isotype:** Mouse IgG1, κ

**Immunogen:** Human breast carcinoma cell line PMC-42

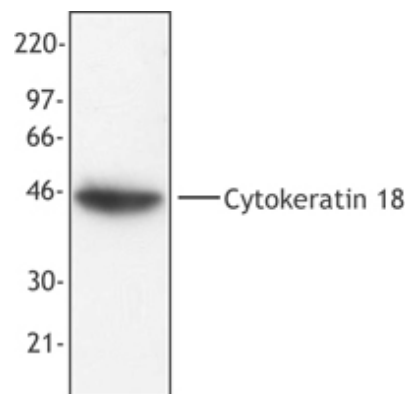
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide at 0.5 mg/ml.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.



MCF-7 cell extract was resolved by electrophoresis, transferred to nitrocellulose and probed with monoclonal anti-cytokeratin 18 antibody (clone DA-7). Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system.

## Applications:

**Applications:** WB - *Quality tested*  
IF - *Validated*  
ELISA, ICC, IHC, IP - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 5 µg antibody per 5 ml antibody dilution buffer for each mini-gel. For immunofluorescence microscopy: Use a dilution range of 1-4 µg/ml. It is recommended that the reagent be titrated for optimal performance for each application.

**Application References:** 1. Taylor-Papadimitriou J, *et al.* 1989. *J. Cell Sci.* 94:403.  
2. Lauerova L, *et al.* 1988. *Hybridoma* 7:495.

**Description:** Cytokeratin 18, also known as keratin 18, is a type I intermediate filament protein with a molecular weight of approximately 48 kD. Cytokeratin 18 is a heterotetramer composed of two type I and two type II keratins. Cytokeratin 18 associates with cytokeratin 8 and is widely expressed in simple epithelial tissues in the adult where it is found in the cytoplasm, nucleus, and nucleolus. Cytokeratin 18 is associated with the cytoskeleton and mutations in this protein have been associated with liver disease after environmental insult. Cytokeratin 18 can be modified by glycosylation, phosphorylation (Ser34 and Ser53), acetylation (Ser2) and proteolytic cleavage at amino acids 238 and 397 by caspase family members. The cytokeratin 18 protein interacts with a number of proteins including caspase 3, 14-3-3 gamma, 14-3-3 zeta, 14-3-3 sigma, 14-3-3 beta, 14-3-3 eta, keratin 5, keratin 8, TNF receptor II, plakophilin 2, EGF receptor, and usherin, among others. The DA-7 monoclonal antibody recognizes human cytokeratin 18 and is useful for Western blotting. This antibody has also been reported to be useful for immunoprecipitation, immunohistochemistry (paraffin sections), immunocytochemistry, and ELISA.

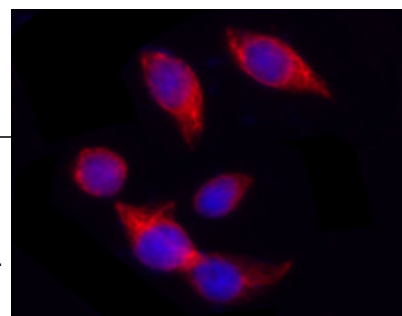
**Antigen References:** 1. Ku N, *et al.* 2003. *Proc. Natl. Acad. Sci.* 100:6063.  
2. Kulesh DA and Oshima RG. 1989. *Genomics* 4:339.  
3. Steinart PM and Roop DR. 1988. *Ann. Rev. Biochem.* 57:593.

**Related Products:**

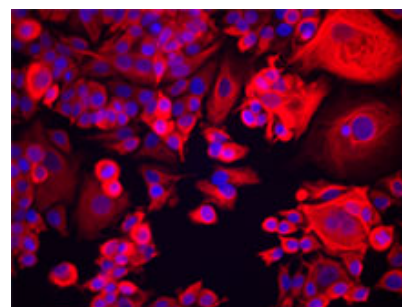
**Product**  
HRP Goat anti-mouse IgG (minimal x-reactivity)

**Clone**  
Poly4053

**Application**  
ELISA, IHC, WB



HeLa cells stained with purified mouse monoclonal antibody against Cytokeratin 18 (clone DA-7), followed by Rhodamine Red-X conjugated Donkey anti-mouse IgG and DAPI



MCF-7 cells were stained with anti-Cytokeratin 18 (clone DA-7), followed by Alexa Fluor 546 secondary antibody and DAPI (nuclei). Images were acquired on a Nikon FC300 inverted microscope at 20X magnification. Data provided by Dr. John Nolan, La Jolla Bioengineering Institute.



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